of intubation and tube localization might be shortened and the incidence of early postoperative throat pain and hoarseness be reduced with the use of bronchial blocker.

GW25-e0760

Comparison of culture characteristics between bone marrow and adipose tissue-derived swine mesenchymal bone marrow stem cells

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Objectives: To investigate the differences of ex vivo culture characteristics between swine adipose tissue-derived mesenchymal stem cells (AT-MSCs) and bone marrow-derived mesenchymal stem cells (BM-MSCs).
Methods: Chinese Bama swines of either sex, weighing 20-30 kg, were used in this study AT-MSCs were harvested from inguinal subcutaneous fat tissue and BM-MSCs were isolated from bone marrow. AT-MSCs and BM-MSCs were cultured and the morphology of the cells was observed. The surface antigens (CD29, CD34, CD45, CD90) of AT-MSCs and BM-MSCs were examined by flow cytometry. The growth and proliferative effect, as well as the ability of adipogenic and osteogenic differentiation of AT-MSCs and BM-MSCs were observed.
Results: Both AT-MSCs and BM-MSCs were checked as stem cells by flow cytometry, showing positive expression of CD29, CD90, and negative expression of CD34, CD45. AT-MSCs could passage after cultured for about 5-7 days, but BM-MSCs were about 7 - 10 days. Compared with BM-MSCs, AT-MSCs had more powerful ability of growth and proliferative. Quantitative real-time PCR (qRT-PCR) revealed there was no significant difference in expression of a-skeletal actin and Troponin-I in BM- and AT-MSCs.
Conclusions: AT-MSCs were good choice for transplantation research of swine.

GW25-e3359

One case of heart pacemaker implantation 10 years after primary heart transplantation

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Objectives: Male, 41 years old, accepted heart transplantation in our hospital 10 years ago due to dilated cardiomyopathy, heart failure. The patient came to hospital because of palpitations and weakness of lower limbs for 1 day this time. Physical examination: T 36.4°C, P 38/min, R 16/min, BP 131/68 mmHg, His consciousness was clear. No abnormal breath sound was heard. Heart rate 38/min. Cardiac rhythm was not regular. No pathological murmurs.
Methods: The result of the holter: Sinus rhythm, paroxysmal atrial fibrillation, advanced or three degree atrioventricular block, average heart rate is 76 bpm, the slowest is 35 bpm, the fasted is 113 bpm, the amount of more than 2 seconds long pause is 175.
Results: The diagnosis of the patient was dilated cardiomyopathy heart failure NYHA class IV heart failure degree III post of heart transplantation, arrhythmia paroxysmal atrial fibrillation three degree atrioventricular block. We used allkinds of drugs to improve the patient's heart rate, but there was no effect. So we implanted a cardiac pacemaker (DDD) at last.
Conclusions: Bradycardia is one of the most common complications after heart transplantation, mainly because of denervation effect and sinus node dysfunction, most of them occurs early after operation. Studies have reported that the probability of bradycardia increases by using the standard orthotopic heart transplantation. That attributes to the compromising the integrity of right atrium, the damaging of sinoatrial node and atrioventricular bundle conduction system. While the double chamber heart transplantation reduces the incidence of this complication. This patient was operated with modified double chamber heart transplantation. The right atrium and sinus node of receptor were removed, the left atrium, aorta, pulmonary were retained. By this method, the pressure of right atrial is lower, the incidence of arrhythmia is fewer, tricuspid valve insufficiency is infrequent. But because the double chamber heart transplantation also anastomosed left atrial, it also has the problem of large atrial, anastomotic scar, thrombus forming, damaging of the conduction system. In addition, the posterior mitral valve leaflet is composed of left atrial cardiac tissue; this method will affect the mitral valve function, caused by incomplete closure of the mitral valve. Atrial fibrillation and three degree atrioventricular block may be related to the aforementioned mechanism in this patients.

GW25-e4332

The clinical characters of 119 cases of death patients in the Emergency Department

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Objectives: In order to provide evidence for developing a reasonable clinical strategy in emergency ICU (EICU), we compared the clinical data of patients died in the EICU with those in the medical ICU (MICU) and surgical ICU (SICU) to find out clinical differences.
Methods: The data of death patients from January 1, 2013 to December 31, 2013 in EICU, MICU and SICU of the First Affiliated Hospital of Sun Yat- Sen University was collected and analyzed, including 119 cases in EICU, 53 cases in SICU and 36 cases in MICU. General condition (such as age and sex), clinical condition (such as APACHE II score), the length of stay and the cost of hospitalization was analyzed, as well as different attitudes of family members to the treatments in each department.
Results: There were 119 cases of death patients in EICU, 64/55 (male/female); 53 cases in SICU, 43/10; and 36 cases in MICU, 26/10. Significant difference of sex ratio was among them (SICU versus MICU, P=0.323; EICU versus SICU, P<0.001; EICU versus MICU, P=0.016). The average age in EICU was 78 years old (2, 97); in SICU was 59 years old (12, 94) and in MICU was 63 years old (16, 92). The death age in EICU was apparently elder than in SICU (P<0.001)and MICU (P<0.001).There was no difference in APACHE II scores: EICU 31 (15, 50), SICU 34 (19, 50), MICU 29 (15, 53). It indicated the severity of them was of no difference. The average length of stay in EICU was 2 days (1, 46); in SICU was 11 days (1, 84)and in MICU was 14 days (1, 60). We can make out that the length of stay in EICU was significantly shorter than that in SICU (P<0.001)and MICU (P<0.001).The average treatment costs in EICU were 8395 RMB (1281, 150909), in SICU were 101368 RMB (7643, 150909), and in MICU were 79048 RMB (9675, 474129). Therefore the cost of hospitalization in EICU are apparently less than that in SICU (P<0.001) and MICU (P<0.001). Family member attitudes: 86 cases of 119 patients gave up treatment in EICU, by contrast, 5 cases of 53 patients gave up in SICU, but none of 36 cases in MICU gave up. The abandon proportion of EICU was significantly higher than that of SICU (P<0.001) and patients with MICU (P<0.001).
Conclusions: Death patients in EICU are mostly elderly patients with end-stage disease in critical condition, but the attitudes of their family members to their treatments were negative. So though critical, neither was the average length of stay too long nor were the treatment costs too high. On the other hand, death patients in MICU and SICU are mostly younger, and their family members are more positive to their treatments. That is why their length of stay is longer and treatment costs are higher. Therefore, timely communication with the family before coming up treatment schedule is a reasonable strategy.

GW25-e3179

Study the relationship of left atrial volume index and vasovagal syncope

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Objectives: Through detecting the left atrial volume index (LAVI) and cardiothoracic ratio, to explore the relationship between the volum and function of the heart and the vasovagol syncope (VVS).
Methods: The 68 cases in observation group were hospitalization in the First Hospital of Jilin University and diagnosised VVS, from January 1, 2012 to December31; The 60 cases in control group were selected in children and adolescents healthy physical examination. All patients were given the heart color Doppler ultrasound, head up tilt test (HUT), body height, weight, chest X-Ray and account the LAVI and cardiothoracic ratio. Measuring the LAVI by method of biplane area-length, LAVI (ml/m^2)=left atrial volume (ml) / body surface area (m^2). Left atrial volume= $(\pi/6)\cdot(LAd)\cdot(Lx)\cdot(Sx)$. Left atrial diameter (LAd) was M type ultrasound measured in parasternal end-systole from the aorta posterior wall to left atrium behind the distance (cm). Lx was left atrial area long axis recorded by cardiac apex four chamber trace chart (cm). Sx was a short axis. The top of the right diaphragm method to calculate the cardiothoracic ratio. The data of experimental results was analysed using the statistical software SPSS17.0. Measurement data was used t test, presented as (x±s). And numeration data was used x^2 test, P<0.05 was statistically significant.
Results: There were 6 cases VVS vascular inhibition (VVS-VI) patients, 24 cases VVS cardiac inhibition (VVS-CI) and 38 cases VVS mixed inhibition (VVS-MI) in the observation group. The average age were 12.19±2.01 and 12.15±2, in the observation group and the control group respectively, t=0.10, P>0.05.The two groups had no statistically significant difference in age. The observation group had 23 boys and 45 girls, and the control group had 31 boys and 29 girls, x^2=4.16, P<0.05. There was statistical significance in two groups, The observation group had more girls, The LAVI values were 21.06±2.59ml/m^2 and 23.45±3 ml/m^2, in observation group and the control group respectively, t=4.29, P<0.05, there was statistical significance in two groups, the observation group LAVI was lower than that of control group. The LAVI values were 21.06±2.59ml/m^2 and 23.45±3.01ml/m^2, in VVS-VI and control group respectively, t=3.36, P<0.05, there was statistical significance in two groups. VVS-VI LAVI value was lower than the control group; LAVI values were 21.41±2.98ml/m^2 and 23.45±3.01ml/m^2, in VVS-MI and control group respectively, t=3.27, P<0.05, there was statistical significance in two groups. VVS-MI LAVI is lower than control group; LAVI values were 21.23±3.22ml/m^2 and 23.45±3.01ml/m^2, in VVS –CI and control group respectively, t' =1.61, P>0.05, there were no statistical significance in two groups. The cardiothoracic ratio were 0.43±0.07 and 0.46±0.06, in two groups respectively, t=3.05, P<0.05, with statistical significance, the observation group is lower than that of the control group.
Conclusions: VVS is related to the size and function of left heart. The smaller LAVI and cardiothoracic ratio children and teenagers is, the more susceptible to VVS.